

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/DE2004/001439

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 F28D7/06 F28F9/013 F28F9/22

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F28F F28D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 253 701 A (LEIDINGER BERNHARD PROF DR) 19 October 1993 (1993-10-19) column 4, line 4 - line 13; figures	1-11
A	US 5 915 465 A (FIX MICHAEL ET AL) 29 June 1999 (1999-06-29) figures	1-11
A	US 3 656 548 A (DONALDSON DESMOND M) 18 April 1972 (1972-04-18) figures 1,2	1,5

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the International filing date but later than the priority date claimed

"T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

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Date of the actual completion of the international search

24 November 2004

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01/12/2004

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Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5253701	A	19-10-1993	DE 4130693 C1	29-10-1992
			EP 0532849 A2	24-03-1993
			JP 2651089 B2	10-09-1997
			JP 5203376 A	10-08-1993
			RU 2071017 C1	27-12-1996
US 5915465	A	29-06-1999	EP 0864830 A1	16-09-1998
			CA 2220607 A1	14-09-1998
			DE 59705073 D1	29-11-2001
			DK 864830 T3	04-02-2002
			JP 10300370 A	13-11-1998
US 3656548	A	18-04-1972	CA 923490 A1	27-03-1973
			DE 2119873 A1	11-11-1971
			FR 2086290 A5	31-12-1971
			GB 1316514 A	09-05-1973
			ZA 7101986 A	27-09-1972